

(Company Name)

(Company Name) ✓

**RE: TESTING OF (3) SAMPLES OF 750 MM (30") DIAMETER
SMOOTHWALL TYPE 'S' POLYETHYLENE PIPE TO AASHTO
M294M-03 FOR THE ESC PROGRAM**

CONDITIONING: Not less than 40 hours at $23 \pm 2^\circ \text{C}$ (73° F)

TEST RESULTS:

SECTION 6.1 BASIC MATERIALS

Results:

	DENSITY (g/cm ³)	MELT INDEX (g/10 minutes)	CARBON
TRI/Environmental	0.950	0.29	2.54
(Company Name)	0.952	0.24	2.19

SPECIFICATION: Minimum Cell Class 335400C and SP-NCTL 15% 24hours.
Density .945 to .955 g/cm³.
Melt index 0.15 to 0.40 g/10 min.
Carbon Black Content 2% minimum / 5% Maximum
*Compounds that have a higher cell classification in one or more properties with the exception of density are acceptable provided product requirements are met.

CONCLUSION: Specification is met.

SECTION 7.1 WORKMANSHIP

	RESULTS
TRI/Environmental	Pass
(Company Name)	Pass

SPECIFICATION: Free of foreign inclusions and visible defects. Inner liner shall be fused to outer corrugated wall at all internal corrugation crests.

CONCLUSION: Specification is met.

SECTION 7.2 PIPE DIMENSIONS

SECTION 7.2.2 WALL THICKNESS

	INNERWALL THICKNESS
TRI/Environmental	0.108"
(Company Name)	0.103"

SPECIFICATION: The minimum inner wall thickness requirement is 1.5 mm (0.059 in)

CONCLUSION: Specification is met.

SECTION 7.2.3 INSIDE DIAMETER

	INSIDE DIAMETER
TRI/Environmental	29.90"
(Company Name)	29.88"

SPECIFICATION: Nominal inside diameter shall not exceed 4.5% oversize or 1.5% undersize and not more than 30mm oversize.
739 – 780mm (29.08" – 30.70")

CONCLUSION: Specification is met.

SECTION 7.4 PIPE STIFFNESS

	ORIENTATION	PIPE STIFFNESS
TRI/Environmental	0 / 45 / 90	43 / 43 / 39
(Company Name)	0 / 45 / 90	42 / 42 / 38

SPECIFICATION: The minimum pipe stiffness requirement at 5% deflection is 195 kPa. (28 PSI)

CONCLUSION: Specification is met.

SECTION 7.5 PIPE FLATTENING

	RESULTS
TRI/Environmental	Pass
(Company Name)	Pass

SPECIFICATIONS: There shall be no evidence of bucking, cracking, splitting or delamination when the vertical inside diameter is reduced by 20%.

CONCLUSION: Specification is met.

SECTION 7.6 ENVIRONMENTAL STRESS CRACKING

	RESULTS
TRI/Environmental	Pass
(Company Name)	Pass

SPECIFICATION: There shall be no cracking of the pipe.

CONCLUSION: Specification is met.

SECTION 7.7 BRITTLENESS

	RESULTS
TRI/Environmental	Pass
(Company Name)	Pass

SPECIFICATION: The pipe specimens shall not crack or split.
Five non-failure out of six impacts will be acceptable.

CONCLUSION: Specification is met.

SECTION 7.8 FITTING REQUIREMENTS

	RESULTS
TRI/Environmental	Pass
(Company Name)	Pass

SPECIFICATION: Pipe connections shall not separate to create a gap exceeding 5 mm. (0.197") when measured between the bell and spigot portions of pipe fittings shall not crack or delaminate.

SECTION 11 MARKING

	MFG.	SIZE	PLANT CODE	PRODUCTION DATE
TRI/Environmental		30" 750mm		N/A
(Company Name)		30" 750mm		02/04/04

SPECIFICATION: Pipe and fitting shall be marked at intervals not more than 3.5m, manufacturer's name or trademark, nominal size, AASHTO M294M, plant code and date of manufacture or appropriate code.

CONCLUSION: Specification is met.

(Typed Name)

Quality Control Manager